V-Switch 3440

SANRAD V-Switch 3440 with integrated SANRAD StoragePro software is an open, scalable solution that provides easy, robust SAN connectivity and storage management for any physical or virtual server.

V-Switch 3440 provides the best cost performance in the V-Switch family. It uses a real-time operating system and high-end network processors to deliver high performance with complete component and system redundancy.

SANRAD StoragePro software, included with the V-Switch 3440, delivers comprehensive storage pooling, virtualization and management services.

Global Data Replication (GDR) software can be added to provide enterprise-class data replication and site recovery between V-Switches located at facilities connected by any local, metropolitan or wide area IP network.

SAN CONNECTIVITY AND MANAGEMENT FOR ANY SERVER

SANRAD's unique network architecture delivers open, heterogeneous support for any storage, providing IT managers complete flexibility to leverage existing storage investments and add new storage to meet the specific cost, performance, and reliability needs of the enterprise.

SANRAD V-Switches couple FC and iSCSI connectivity with integrated storage management, virtualization, and disaster recovery services. Customers can use inexpensive iSCSI to connect and manage any storage wherever it resides, physically or virtually, regardless of geographic location. Critical tasks such as backup, data migration and replication are performed non-disruptively with no downtime to the business.

V-SWITCH 3440 KEY FEATURES AND BENEFITS

▽ **Open Heterogeneous System Architecture**
Use any brand or type storage system directly connected or connected through a FC SAN fabric to the V-Switch to create and manage a single virtual storage pool. Leverage existing storage and combine any new storage from other vendors.

▽ **Scalable Virtual Storage Pools**
Dynamically create large storage pools by consolidating many storage systems into a centrally managed pool that can easily scale to several peta-bytes.

▽ **Efficient Network-Based Virtualization**
Create thousands of custom storage volumes across all connected storage systems within the storage pool to improve storage utilization and reduce storage costs.

▽ **Virtual Storage Optimized for Server Virtualization**
Get completely autonomous recovery of virtual servers with no need for IT intervention. Gain uninterrupted virtual machine access to data even during complete system outages, regardless of the physical location of the virtual server.

▽ **Flexible Tiered Storage**
Combine and virtualize different storage systems into the same storage pool to provide various service levels, storage costs and performance grades for different applications.

▽ **High Availability**
Use Active/Active V-Switch clustering with automatic failover, failback and multi-pathing for uninterrupted access to data.

▽ **Easy, Live Data Migration**
Copy over 2TB of data per hour between storage systems without interrupting production to eliminate downtime and simplify storage management.

▽ **Local Data Protection**
Use local inter-campus / inter-datacenter synchronous data mirroring over FC or dedicated fiber optic cables (dark fiber), snapshot, virtual shadow copy service (VSS) and cloning to prevent data loss.

▽ **Enterprise-Class Disaster Recovery (Sold as Option)**
Get robust data replication and recovery with no disruption to IT operations. Implement unlimited data replication and site recovery between V-Switches located at facilities connected by any local, metropolitan or wide area IP network. No additional replication hardware or software is required at the server or storage level for significant cost savings.

▽ **Storage Security**
Get complete authorization control and data protection with Access Control Lists and iSCSI login authentication (CHAP, SRP).

▽ **Simple and Centralized Management**
Use a single, intuitive web-based GUI or a comprehensive CLI with SSH.

▽ **Removable Onboard Compact Flash**
Quickly replace or replicate V-Switch configurations, mirror the configuration database for fast recovery, replacement and replication of V-Switches.

▽ **Reliable, Easy-to-Service Package Design**
1 unit rack size. Dual redundant hot-swappable power supplies deliver continuous operation and easy replacement. All network and storage connections are on the front panel. Adjustable rack mounts fit racks up to 39" in depth.

SANRAD

V-Switch 3440

V-SWITCH 3440 PRODUCT SPECIFICATIONS

Storage Virtualization and Volume Management

Maximum number of servers supported: 200
Maximum number of volumes supported: 51,200
Maximum capacity: 4096 TB (4.096 PB)
Maximum volume size: 64 TB

FC Interfaces

4 FC ports
Copper SFP HSSDC2
Optic LC SFP SW/LW
1, 2 or 4 Gb/s auto speed detection
L,N or NL ports

Management Interfaces

RS232 DB-9 port
Ethernet 10/100 RJ45 port

Network Interfaces

3 1Gbit iSCSI Ethernet ports
Copper RJ45 1000BaseT
Optic SFP 1000Base-SX
Optic SFP 1000Base-LX

Internet Standards

RFC 791 IP v4
RFC 793 TCP, RFC 894 IP/Ethernet
RFC 1042,IP/802
RFC 1517
RFC 792 ICMP, 950 ISSP
RFC 3720-iSCSI
SSH-2
RFC 854 Telnet

Fibre Channel ANSI Standards

FC-AL-2
FC-PLDA
FC-FLA
FC-PH-3
FCP

Management Standards

SNMP V2
RFC 2863
RFC 2011
RFC 2012
ID SCSI MIB 05
ID iSCSI MIB 09

Ethernet Standards

IEEE 802.3z
IEEE 802.3.ab

Wake up on LAN

Removable Compact Flash

Dimensions

1.75"H x 17.2"W x22.8" D
(4.4 H x 43.8 W x 58 D cm).
Standalone surface mounting or fits standard 19 inch EIA rack

Power

Dual Hot Swap Power Supplies
100-250V, 50-60Hz Auto Switching, 250 WATT

Weight

14.1 lb (6.4 kg)

Operating Temperature

32° to 122°F (0°-50°C)

Storage Temperature

-40° to 75°F (-40°-167°C)

Humidity (non-condensing)

10 to 95%

Altitude

-500ft to -10,000ft; (-152m -3050m)

Regulatory Compliance

EMC (Emission):
USA & CANADA: FCC part 15 Class A
Europe and Rest of the World:
EN55022 Class A
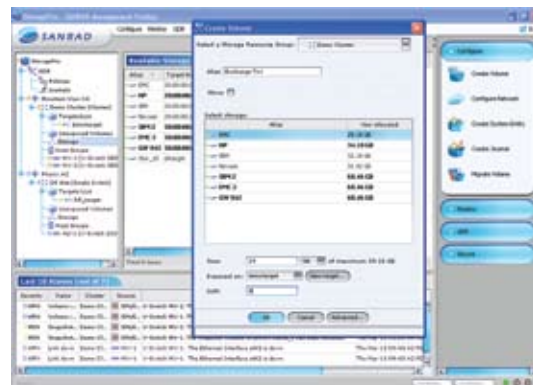Immunity: EN55024

Safety

USA & CANADA: UL60950
Japan: EN60950
Europe and Rest of the World:
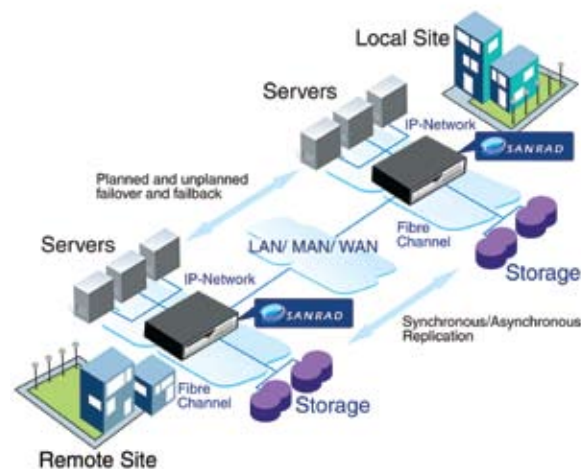EN60950

Environment

RoHS 6 Compliant
cRoHS Compliant
WEEE Compliant

Rear View of V-Switch

StoragePro Management GUI

Typical Installations

SANRAD